# Bhagyawanth Ningappa

## Summary

Computer Science undergraduate with strong foundations in software engineering principles and hands-on experience in systems programming, database management, and full-stack development. Skilled in C, Java, Python, and SQL, with proven ability to quickly learn new technologies, solve complex problems, and build scalable solutions

## Education

## Indian Institute of Information Technology, B. Tech in Computer Science

Nov 2022 - July 2026

• Coursework: Operating Systems, Data Structures and Algorithms, Computer Networks, DBMS, OOPs in Java, Programming in C, Machine Learning, Artificial Intelligence, Design and Analysis of Algorithms

## **Projects**

## Bank Management System | (Java, MySQL, JDBC)

GitHub

- Developed a console-based system for user registration, balance inquiries, fund transfers, deposits, and withdrawals.
- Utilized Object-Oriented Programming principles (inheritance, polymorphism) and JDBC for database integration.
- Implemented exception handling for secure data processing and optimized data retrieval for faster response times.

## Pharmacy Management System GitHub

- Developed a comprehensive system for managing pharmacy operations, including inventory tracking, billing, and customer records.
- Implemented features such as stock level monitoring, expiry management, and automated reordering.
- Integrated e-prescription validation, drug interaction checks, and compliance with healthcare regulations.
- Designed a user-friendly POS (Point of Sale) system for fast and secure transactions.
- Utilized data analytics for sales, inventory performance, and customer insights.

## Plant Disease Detection Model | (Python, TensorFlow, OpenCV, Machine Learning) GitHub

- Trained a convolutional neural network (CNN) using TensorFlow to classify plant diseases from leaf images.
- Preprocessed image data using OpenCV to enhance features and improve model accuracy.
- Developed a Python-based application to demonstrate the model's capability for real-time classification.

## Custom Linux Shell | (C, Linux)

- Developed a command-line shell from scratch to understand core operating system concepts.
- Implemented process creation and management using Linux system calls (fork, execvp, waitpid).
- Designed a parser for handling commands and arguments, demonstrating understanding of systems programming.

## **Skills Summary**

Languages: C, Java, SQL, Python, Kotlin, LaTeX

Frameworks: Spring Boot

Databases: MySQL, PostgreSQL,

Tools & OS: Linux, Git, MySQL Workbench

Cloud & Analytic: Google BigQuery, Looker Studio, SQL Analytics.

## **CERTIFICATIONS**

• One Roadmap Skill Certification - SQL

Certificate

HACKERRANK - SQL(Intermediate)

Certificate

• Google Cloud Certification

## ACHIEVEMENTS

• Google Cloud Certification

2025

Earned BigQuery for Data Analysts credential from Google Cloud Platform.

#### **Key Skills Gained:**

- Data querying and optimization in BigQuery, advanced SQL techniques for analytics, data visualization with Looker Studio, and performance tuning with cost optimization strategies.
- Secured Rank 7 in MTP: Product Test Series, a national-level competition by E-Cell, IIT Guwahati, focused on aptitude, SQL, and data-driven problem-solving.